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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/760,668	01/20/2004	Julio Concha	60,426-264;10807/10785	1077
26096	7590	04/29/2005	EXAMINER	
CARLSON, GASKEY & OLDS, P.C.			JIANG, CHEN WEN	
400 WEST MAPLE ROAD			ART UNIT	
SUITE 350			PAPER NUMBER	
BIRMINGHAM, MI 48009			3744	

DATE MAILED: 04/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/760,668

Applicant(s)

CONCHA ET AL.

Examiner

Chen-Wen Jiang

Art Unit

3744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-11, 13-16 and 18-20 is/are rejected.
- 7) ☒ Claim(s) 4, 12 and 17 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 20040120.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1,2,6,7,8,9,10,14,15,19 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Sakakibara et al. (U.S. Patent Number 6,370,896).

Sakakibara et al. disclose a hot water supply system with supercritical heat pump cycle. Referring to Fig.2, the system comprises a supercritical heat pump cycle 200, water tank 300, first water temperature sensor 272 detects the temperature of the water flowing into the water heat exchanger, second water temperature sensor 274 detects the temperature of the hot water flowing from the water heat exchanger and temperature sensors 370 detect the temperature of the hot water within the tank. The heat pump is activated when the temperature in the tank 300 is less than a predetermined level. Under the principals of inherency, if a prior art device, in its normal and usual operation, would necessarily perform the method claimed, then the method claimed will be considered to be anticipated by the prior art device. When the prior art device is the same as a device described in the specification for carrying out the claimed method, it can be assumed the device will inherently perform the claimed process. *Ir re King*, 801 F.2d 1324, 231 USPQ 136 (Fed. Cir. 1986).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 5,13 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakakibara et al. (U.S. Patent Number 6,370,896) in view of Stewart (U.S. Patent Number 5,367,602).

Sakakibara et al. disclose the invention substantially as claimed. However, Sakakibara et al. do not disclose sensor at tank outlet for de-energize the heat pump. Stewart discloses sensor at tank outlet for de-energize the heat pump in the same field of endeavor for the purpose of safety. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the apparatus of Sakakibara et al. with a sensor at tank outlet for de-energize the heat pump in view of Stewart so as to improve safety.

5. Claims 3,11 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakakibara et al. (U.S. Patent Number 6,370,896) in view of Yamaguchi et al. (JP 62010535).

Sakakibara et al. disclose the invention substantially as claimed. However, Sakakibara et al. do not disclose sensor at tank inlet for de-energize the heat pump. Yamaguchi et al. disclose sensor at tank inlet for de-energize the heat pump in the same field of endeavor for the purpose of safety. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the apparatus of Sakakibara et al. with a sensor at tank inlet for de-energize the heat pump in view of Yamaguchi et al. so as to improve safety.

*Allowable Subject Matter*

6. Claims 4,12 and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chen-Wen Jiang whose telephone number is (571) 272-4809. The examiner can normally be reached on Tuesday-Friday from 8:00 to 6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Denise Esquivel can be reached on (571) 272-4808. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chen-Wen Jiang  
Primary Examiner

